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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/838,118	04/20/2001	Hiroshi Takanashi	2001-0476	9938

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EXAMINER	
LEE, SIN J	

ART UNIT	PAPER NUMBER
1752	6

DATE MAILED: 03/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/838,118	Applicant(s) TAKANASHI ET AL.	
	Examiner Sin J Lee	Art Unit 1752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 February 2003* .

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-4* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-4* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Upon considering the amendment of February 14, 2003, the Examiner determined that there is an adequate support in the original disclosure (for example, applicants state in the original disclosure that the content of the component (C) is 0.5-5 wt% whereas the content of the component (E) is 0.001-0.3 wt%, and these two ranges do not overlap) for the newly added limitation that *component (E) is different from component (C)*. However, applicants need to provide antecedent basis for this limitation by inserting that the component (E) is different from the component (C) into the original disclosure.

2. Based on the amendment of February 14, 2003, the previously made 103(a) rejections on claims 1-4 over Kashio et al'632 are hereby withdrawn: In the last Office action, it was the Examiner's assertion that Kashio's photopolymerization initiator, benzophenone, teaches the component (C) as well as the component (E) since the claim language did not mandate that the components (C) and (E) had to be separate components. But in the amendment, applicants excluded benzophenone from being the component (E), and applicants now require that the component (E) is different from component (C).

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

4. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pine (4,361,640) in view of Matsubara et al (5,009,981).

Pine teaches a photopolymerizable element (useful for making printing plates) comprising a *support* bearing a layer of a photopolymerizable composition. See abstract and col.1, lines 20-24. Pine's photopolymerizable composition contains a binder system (*present component (A)*), an ethylenically unsaturated monomeric compound having at least two terminal ethylenic groups capable of forming a high polymer by free-radical initiated chain-propagated addition polymerization (*present component (B)*), a free radical generating addition polymerization initiator (*present component (C)*), a thermal polymerization inhibitor (*present component (D)*). Pine teaches the amount of their polymerization initiator to be 0.1-5.0% by weight. Since this range overlaps with present range of 0.5-5 wt%, the prior art's range would have made present range *prima facie* obvious. In the case "where the [claimed] ranges overlap or lie inside ranges disclosed by the prior art," a *pirma facie* case of obviousness would exist which

may be overcome by a showing of unexpected results, In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976).

Pine does not teach present component (E). Matsubara teaches (col.1, lines 47-57, col.13, lines 15-23) benzenesulfonic acid and naphthalenesulfonic acid among eleven examples of stabilizer used in their photopolymerizable composition, which also contains a photopolymerization initiator, photopolymerizable monomer, polymeric binder, and a polymerization inhibitor (see col.1, lines 52-57, col.12, lines 42-47). Also, Matsubara's photosensitive composition is used for preparing negative type photosensitive lithographic printing plate (see col.1, lines 9-12) and Pine's photosensitive composition is also used in preparing printing plates of negative type (Pine's printing plate is made by removing the unexposed portions of the photopolymerizable layer (see col.5, lines 13-15)). Since there are only several examples to choose from, it is the Examiner's position that it would have been obvious to one of ordinary skill in the art to use Matsubara's benzenesulfonic acid or naphthalenesulfonic acid in Pine's photopolymerizable composition in order to improve stability of Pine's photopolymerizable composition. Both of these compounds meet present formula (I) when R^1 is either benzene or naphthalene (aromatic hydrocarbon groups) and when X is SO_3H. Matsubara teaches that these additives can be used in 0.01 to 30% by weight based on the total solids of the composition. Since this range overlaps with present range of 0.001 to 0.3%, the prior art's range would have made present range *prima facie* obvious. see In re Wertheim, supra.

Therefore, Pine in view of Matsubara would render obvious present component (E) in the amount of 0.001 to 0.3%.

As to the present limitation of claim 1 for the thickness of the photosensitive layer (0.45-0.8 mm), Pine teaches (col.2, lines 20-23) thickness for the photopolymerizable layer to be in the range of 0.0127 mm to 6.35 mm (as converted by the Examiner). Since this range overlaps with present range, the prior art's teaching would have made present range *prima facie* obvious. In re Wertheim, supra.

Also, as to the present limitation, "a *negative working* photosensitive resin composition", since Pine's printing plate is made by removing the unexposed portions of the photopolymerizable layer (see col.5, lines 13-15), Pine's photopolymerizable composition is a negative working photosensitive resin composition as presently claimed. Therefore, Pine in view of Matsubara would render obvious present invention of claim 1.

With respect to present claim 3, since Pine uses an aqueous *alkaline* solution for developing his photopolymerizable element (see col.5, lines 13-15), it is the Examiner's position that it is implied that Pine's binder is alkali-soluble. Therefore, Pine in view of Matsubara would render obvious present invention of claim 3.

With respect to present claim 4, Pine teaches (col.4, lines 67-68, col.5, lines 1-15) that printing reliefs can be made by imagewise-exposing (using for example, an image-bearing transparency) the photopolymerizable layer of his photopolymerizable element to actinic radiation and then developing by removing the unexposed portions of the photopolymerizable

layer using an aqueous alkaline developer solution. Therefore, Pine in view of Matsubara would render obvious present invention of claim 4.

5. Applicants point out that Matsubara employs a photosensitive diazo compound whereas the present composition does not contain a photosensitive diazo compound. However, Matsubara was not cited for the teaching of the diazo compound but for the teaching of benzenesulfonic acid or naphthalenesulfonic acid which is used as a stabilizer in a photosensitive composition.

Applicants also argue that it would not have been obvious to those skilled in the art to add an additive taught by Matsubara into Pine's negative photosensitive resin composition which basically contains a resin, a polymerizable monomer and a photopolymerization initiator since Matsubara's composition is very different from that of Pine. The Examiner disagrees. First of all, like Pine's photosensitive composition, Matsubara's photosensitive composition also contains a photoinitiator, photopolymerizable monomer, polymeric binder, and a polymerization inhibitor. Secondly, Matsubara's photosensitive composition is used for preparing negative type photosensitive lithographic printing plate and Pine's photosensitive composition is also used in preparing printing plates of negative type. Therefore, it is still the Examiner's position that it would have been obvious to one of ordinary skill in the art to use Matsubara's benzenesulfonic acid or naphthalenesulfonic acid in Pine's photopolymerizable composition in order to improve stability of Pine's photopolymerizable composition.

For the reasons stated above, present 103(a) rejections on claims 1-4 over Pine in view of Matsubara et al still stand.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sin J. Lee whose telephone number is (703) 305-0504. The examiner can normally be reached on Monday-Friday from 8:30 am EST to 5:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Janet Baxter, can be reached on (703) 308-2303. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9311 for after final responses or (703) 872-9310 for before final responses.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-0661.

S. J. L.
S. Lee
March 12, 2003

ROSEMARY ASHTON
PRIMARY EXAMINER